ST. FAITHS UNION.

Estimated Population: 11,075.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

(SYDNEY H. LONG, M.D.,)

FOR THE YEAR 1908.

In November, 1907, a certain portion of the two Parishes of Sprowston and Catton were taken over by the City of Norwich. When getting out statistics for my Annual Report for 1907 I agreed with the Medical Officer of Health for Norwich that it would avoid confusion if we worked on the supposition that the added areas were transferred at the end of the year, and on these lines I got out my Report for 1907.

My statistics for this year (1908) are, of course, entirely exclusive of the two added areas, the estimated population of which was, at the time of their being taken over, as follows :—

Sprowston	1522
Catton	604
Total ...	2126

BIRTHS.

There were 219 Births registered in the Union during the past year. This is equivalent to a Birth-rate of 19·7 as compared with 22·3 of last year, and with 24·6 the average of the past ten years.

DEATHS.

The total number of Deaths at all ages was 181, which is equivalent to a gross Death-rate of 16·3. Forty-seven of these, however, occurred amongst the inmates of Hellesdon Asylum, and therefore amongst " non-residents." By deducting these, we have a corrected Death-rate of 12·1, as compared with 11·8 last year, and with 13·0 the average for the past decennial period.

I regret to say that the loss of infant life is still very high in the district, though there is some slight satisfaction in being able to record the fact that it is gradually declining. During the year just concluded the Infant Mortality was 105·0, as compared with 112·2 in 1907, and 121·5 the average for the past ten years.

It is also encouraging that only one infant under a year is certified as having died of Enteritis or Diarrhœa.

Mortality at Different Ages in the Whole District per 1000 Estimated Population.

	1908.	1907.
Under 1 year ...	2·0 ...	2·5
1 year to 5 years ...	0·9 ...	0·3
5 ,, 15 ,, ...	0·5 ...	0·3
15 ,, 25 ,, ...	0·8 ...	0·3
25 ,, 65 ,, ...	4·6 ...	4·2
65 ,, and upwards ...	7·4 ...	6·9

Infant Mortality.

Deaths under 1 year to 1000 Births.

	1908.	1907.	Average for past 10 years.
Whole District	105·0	112·2	121·5

ZYMOTIC DISEASES.

During the past year there has occurred in the district more than the usual number of cases of infectious disease. This increase is due to an outbreak of Diptheria in the hamlet of Lenwade, at the latter end of the year. In connection with this epidemic, I deemed it necessary to draw up a special report on the water supply of this village, which will be referred to again later on in this report.

In all, 47 cases of Zymotic diseases were notified to me under the "Infectious Diseases Notification Act, 1899." They are referred to under the headings of the different diseases.

Of all the infectious diseases, Whooping Cough was that which was most wide-spread in its distribution. In seven parishes this disease occurred in epidemic form, and in five instances I was obliged to close the school on its account. Seven children died of the disease.

During the year the Council adopted, on my recommendation, the principle of the voluntary notification of cases of Pulmonary Tuberculosis, and this has resulted in three cases of this disease being notified to me. For many years past I have adopted the principle of thorough disinfection of the house after death from consumption, and I hope the day is not far distant when the notification of this disease will be compulsory.

	Notified.	Deaths.
*Diptheria	18	3
*Erysipelas	5	0
*Scarlet Fever	12	0
*Enteric Fever	8	1
*Puerperal Fever	1	1
†Pulmonary Tuberculosis ...	3	13
Whooping Cough	—	7
Epidemic Diarrhœa	—	1
	47	26

*Compulsorily notifiable. †Voluntarily notifiable.

There were thirteen Deaths from Pulmonary Tuberculosis, and six from other Tuberculous Diseases.

DEATH RATE FROM PULMONARY TUBERCULOSIS PER 1000 INHABITANTS.

	1908.	1907.
Whole District (excluding City Asylum)	1·1	0·7

DEATH RATE FROM CANCER PER 1000 INHABITANTS.

	1908.	1907.
Whole District (excluding City Asylum)	0·9	1·4

DIPTHERIA :—18 cases.

3 at Drayton.

Two of these cases occurred at Stanley House, which is situated about a quarter of a mile from the main village. In connection with this house was an insanitary privy with a very large bin. The privy has been repaired, and the bin considerably reduced in size and cemented.

The third case occurred at the top of the hill on the Norwich Road. It was of the laryngeal type, and the child (aged 4) died. There were no insanitary defects found.

2 at Sprowston.

These two cases occurred in one family, who were the first tenants of a new house, the water-supply being from the Norwich Water Works Company. The father kept a paper shop in Norwich, and I can only conclude that the infection was contracted through the medium of his business.

1 at St. Faiths.

A mild case in an infant. The infection was undoubtedly contracted in Norwich.

1 at Weston.

The infection in this case was contracted from children in the adjoining parish of Lenwade.

11 at Lenwade.

It was at the beginning of October that the first case occurred in this village, and although this was followed by ten others, I am glad to say only one death occurred. Had it not been for the prompt assistance I got from Dr. Perry of Reepham, who was looking after the cases, in the free use of Autitoxin, both as a prophylactic and as a curative agent, more cases would undoubtedly have occurred.

As an example of the difficulties one has to contend with in combating infectious diseases in country villages, where no Isolation Hospital is available, and when the housing accommodation is so inadequate, as is the case at Lenwade, I may say that the first case in this epidemic occurred in a family of eight—father and mother and six children. When I first visited them I found a girl and a boy, aged respectively 11 and 13, both ill with the disease, and sleeping in one room. The only other bedroom in the cottage was occupied by the parents, a son aged 15, and three other children, aged six, three, and eight months. The son was in the garden, and had, as I discovered, well-marked diphtheretic membrane on both tonsils ; in addition, one of the other children had a purulent nasal discharge. There was only one room downstairs in this cottage, and the small garden at the back was in free communication with that of the cottage next door, where there were also children. I need hardly say that the children next door did not escape the infection.

During the year the Council have made a regulation that no child that has recently had Diphtheria shall be considered free from infection and eligible to return to school until its throat has been proved, by bacteriological examination, to be free of the Diphtheria bacillus ; the expense of such examination to be borne, when necessary, by the Council. This rule was made applicable to seven children in Lenwade, and the average duration of the infectious period was eight weeks.

ERYSIPELAS :—5 cases.
None of the cases were of a virulent type, and no deaths occurred.

SCARLET FEVER :—12 cases.

4 at Lower Hellesdon. These were all children in one family, and the infection contracted at the Earlham Road School (Norwich). At the time the mother was expecting her confinement, but arrangements were made for her to move to a neighbouring cottage for this event, and both she and her infant escaped the disease.

5 at Swannington. The disease hung about this village from the beginning of January to April, but was limited to three families.

2 at Drayton, in one family.

1 at Wroxham. This case was interesting from the point of view of tracing the infection. One year previous the adopted mother of the patient (a child) had had Scarlet Fever in London. Since then neither she nor the child, who had not been away from the village, had knowingly been exposed to any scarlet fever infection. There was every reason to think that during this twelve months the infection had lain dormant in some of the mother's clothes, and was brought to the surface by her turning out a chest of drawers.

PUERPERAL FEVER :—1 case.

This was a fatal case, and occurred in a young married woman at Booton, after the birth of her first child. So long as the gates of the Law allow unregistered and uncertificated "midwives" to walk through them with impunity, so long will these regretable and preventable deaths occur. This young woman was not attended by a doctor at her confinement, but only by such a "midwife" as I have described.

The following schools were temporarily closed during the year on account of infectious diseases.

Name of School.	Period Closed.	In consequence of.
Felthorpe	April 15th to May 12th	Whooping Cough.
Haveringland	May 1st to May 15th	,, ,,
Booton	June 29th to July 12th	,, ,,
Ringland	Sept. 7th to Sept. 20th	,, ,,
Great Witchingham	Oct. 20th to Nov. 17th	Diphtheria.
Old Catton	Dec. 2nd. to Dec. 15th	Whooping Cough.

METEOROLOGICAL NOTES.

I am indebted to Mr. Arthur W. Preston, F.R. Met. Soc., for the following record of observations made by him in Norwich during the year 1908.

Barometer (reduced to sea level and 32 deg. F.)

Highest (February 7th)	30·66 ins.
Lowest (December 10th)	28·73 ,,
Mean	29·994 ,,

	Deg.
Temperature—Maximum (August 3rd)	81·0
Minimum (January 5th) In screen	17·0
Minimum (January 12th) On grass	14·0
Mean daily maximum	55·7
Mean daily minimum	42·4
Mean temperature of year	49·0
Mean daily range	13·3
Mean dry bulb (9 a.m.)	49·6
Mean wet bulb (9 a.m.)	46·7
Mean dew point (9 a.m.)	43·7
Mean relative humidity (9 a.m.)	80 p.c.
Number of nights with frost—	
In screen..	56
On grass...	108

	Inches.
Rainfall—Total fall	25·16
Below average by	·59
Greatest fall in one day (July 13th)	1·80
Number of days on which rain or snow fell	221
Number of days on which snow fell	27

Wind—Prevailing directions, W. and S., Gales on 13 days.

NOTES ON THE YEAR.

The year entered with a short period of severe frost, giving place to mildness, resulting in the mean temperature of the three winter months being 0·8 deg. above the average temperature. The rainfall of this period was 0·84 in. in excess. The Spring gave a great variety of temperature, the coldness of March and the severity of April being counter-balanced by the unusual warmth of May, thereby causing the mean temperature of the three spring months to be exactly normal. The rainfall of these three months was 1·84 in. above the average. The mean temperature of the three summer months was half a degree deficient, and the rainfall 0·43 in. in excess, while the autumn, which was very fine and warm, was 1·4 deg. above the average temperature, with a rainfall as much as 2·44 in. deficient. The most noteworthy features of the year were the severe thundersquall on February 22nd, the extraordinary snowstorm at the end of April, the warm May, the cool August, the great outburst of heat at the end of September and beginning of October, and the short but sharp period of winterly weather in the last week of the year. The summer, although it lacked the fineness and heat of that of 1906, was a very decided improvement on 1907, and had several fine and warm periods, particularly in the former and latter parts of June, the last half of July, and the first few days of August. The cool, rainy periods in the middle of July and during the greater part of August, and in September were compensated for by the great beauty of the later autumn, which was one of the finest and warmest seasons on record. Garden fruits ripened well, and were abundant. The corn harvest, though rather late in commencing, and retarded by rain from time to time, was generally concluded in this neighbourhood by the middle of September.

GENERAL SUMMARY.

	Temperature.			Rainfall.		
Month	Max. deg.	Min. deg.	Mean deg.	Total ins.	Days with rain.	Greatest fall in. one day. ins.
Jan. ...	54·6	17·0	35·9	1·13	21	·30
Feb. ...	52·0	29·0	40·6	2·17	19	·24
Mar. ...	61·4	26·0	39·9	2·51	25	·32
Apl. ...	59·6	28·2	42·9	2·67	19	·81
May . .	77·2	39·8	56·0	1·79	14	·38
June ...	79·0	39·8	58·9	1·20	15	·23
July ...	80·5	45·0	61·5	3·49	13	1·80
Aug. ...	81·0	43·0	59·0	2·61	19	·62
Sept. ...	76·6	37·0	56·7	2·91	15	1·50
Oct. ...	78·4	30·6	53·5	1·40	19	·32
Nov. ...	56·8	23·4	44·7	1·63	16	·52
Dec. ...	49·0	22·6	38·7	1·65	26	·26
Year ...	81·0	17·0	49·0	25·16	221	1·80

COMPARATIVE TABLE.

	Temperature.			Rainfall.		
Year	Max. deg.	Min. deg.	Mean deg	Total ins.	Days with rain.	Greatest fall in one day ins
1900 ...	87·2	18·4	49·6	26·99	222	1·23
1901 ...	83·5	9·2	48·8	21·06	175	1·60
1902 ...	83·4	14·0	48·4	22·30	192	·80
1903 ...	86·0	24·8	49·5	29·44	208	2·28
1904 ...	87·6	21·0	49·3	21·50	180	·60
1905 ...	82·6	21·4	49·0	22·96	205	1·05
1906 ...	93·0	15·8	49·7	28·54	202	1·05
1907 ...	80·0	14·8	48·4	26·25	231	·74
1908 ...	81·0	17·0	49·0	25·16	221	1·80

Mr. T. Cozens-Hardy has also been good enough to let me have a summary of his observations on the rainfall taken at Oak Lodge, Sprowston, during 1908.

RAINFALL IN 1908.

Rain Gauge.

Diameter of Funnel, 5 ins.

Height { Above Ground, 1 ft.
of Top { Above Sea Level, 101 ft.

Month.	Total Depth. ins.	Greatest fall in 24 hrs. Depth.	Date.	No. of Days on which ·01 or more fell.
January ...	1·00	·21	7th	19
February ...	2·00	·38	29th	18
March ...	2·42	·33	1st	24
April ...	2·23	·55	23rd	20
May ..	1·59	·29	22nd	12
June ...	1·08	·23	17th	14
July ...	3·03	1·55	13th	14
August ...	2·00	·36	31st	17
September ...	1·55	·35	21st	15
October ...	1·48	·38	23rd	17
November ...	1·50	·44	21st	17
December ...	1·27	·27	11th	22
Total ...	21·15			209

Mr. Cozens-Hardy remarks: "The rainfall was 5¼ inches under the average for the last 67 years. There was only one heavy downpour, 1·55 inches in July. I missed a very heavy rain you had in Norwich on September 23rd, when Mr. Preston recorded 1·50 inches and I only ·14 inches. March and April were wet, but the last four months of the year were very dry, although the number of wet days was above the average. Winter aconite well out, and quite yellow on December 25th. Wheat harvest began about August 14th."

The district of St. Faiths being essentially an agricultural one, the occupation of most of the workers is in connection with the land. Those who are willing and able to work as such can usually find employment as farm hands all the year round. Were it not for this out-of-door life the evil effects of over-crowding and badly ventilated houses would undoubtedly be more marked.

HOUSE ACCOMMODATION.

I do not think the house accommodation in the St. Faiths District compares unfavourably with that in other rural districts in East Anglia at any rate. As a rule most of the cottages have a fair sized piece of garden, and, generally speaking, the house and garden are kept in a neat and tidy condition. There are, of course, exceptions; and in one or two villages the house accommodation is inadequate, and cases of over-crowding are periodically brought to my notice. These are always difficult to deal with, because more often than not there is no larger vacant cottage in the village that the family can occupy.

DISPOSAL OF EXCREMENT AND HOUSE REFUSE.

At the period when most of the cottages in the district were built the privy-bin method of human excrement disposal was in vogue. Of late years we have been instrumental in having a very large number of these old bins done away with, and replaced by the pail system. With regard to the disposal of slop water, urine, and other liquid refuse, it is, I think, always advisable to manage without any system of underground drains when any other method of disposal is found to be practicable. In many cases a moveable receptacle, such as an old paraffin tub, which can be slung on a two-wheeled frame, meets the difficulty. This can be wheeled away periodically and emptied on to the garden or allotment.

WATER SUPPLY.

Except in the case of those houses in Catton and Sprowston which are connected up with the Norwich Water Works Company, the water supply of the rest of the houses in the district is from wells. Most of these are surface wells, and in some parts of the district, *e.g.*, at Haynford, at Horsham St. Faiths (the lower part of the village), and at Lenwade, the wells are so shallow that during the winter months the water is often within a few feet of the surface. The water supply of the Hamlet of Lenwade is so unsatisfactory that I was obliged to make a special report on the subject in November, and as no action has so far been taken I herewith reproduce this

REPORT.

" The supply of drinking water in Lenwade is obtained from wells, some 24—30 in number, scattered throughout the village. The level of the water in these wells varies from a few feet below the surface to some 25—30 feet, in the case of the well at the Old Workhouse Cottages, at the northern end of the village, which stand at a higher level than do the other houses in the village. At the same time the water-line at this spot is approximately the same as with the various other wells in the village.

" In a few cases the wells have been deepened, at some time or other by the sinking of a wooden vat, and in many of them the brick lining is beginning to show signs of decay.

" In all cases the well is fitted with a wooden or other covering, and in most instances the brick-work is continued above ground to a height of 12—24 inches. In a few cases the water is drawn by a pump, but in the majority of instances by the chain and bucket method.

METHOD OF DISPOSAL OF SLOP-WATER AND OF STORM-WATER.

" Most of the cottages have gardens attached, though in the case of several this is of very limited extent, about 20 yards by 10 yards, or even smaller.

"Slop-water, it is said, is generally thrown on to the garden, but in connection with many of the houses there are gullies for carrying off storm water, and the overflow from the pump, when this exists ; and I have no doubt from my own observations, that these gullies are also used at times for slop-water, and—most probably—for faecal matter as well.

"Most of these gullies drain into unventilated soak-away cesspools, so that there are almost as many cesspools in the village as there are drinking water wells ; and in several instances where the site of the cesspool is known, this is found to be in close proximity to, *i.e.*, within a few feet of the drinking water well.

"The Pail system of Closets is that which is in vogue with most of the Cottages, and where a sufficient amount of garden exists the contents of the Pails are dug into the garden soil.

"In accordance with your instructions I have had a chemical analysis made by the County Analyst of the water from six wells in different parts of the Parish. In the case of four of the wells Mr. Sutton unhesitatingly condemns the water as unfit for drinking purposes, and in the case of the other two, he says, 'Neither of them is good water, and it would be desirable to discontinue their use if a better supply were available.'

"There is one well, in the middle of the village, which is said to be a tube well, the exact depth of which is not known, from which the water is drawn by a pump, and several cottages get their water-supply from this well. Mr. Sutton reports upon it as follows :—'This water has a large excess of organic impurity derived from sewage or animal sources. It is unfit for drinking.' Probably the water in this well comes from the same source as that of the others.

"In the case of a well which supplies four families, and which is situated at the back of the smith's shop, Mr. Sutton reports :—'This water is highly polluted with sewage. It is injurious to health and unfit for drinking purposes.' This well is situated within five yards of a cesspool.

"With regard to the other two wells reported upon by Mr. Sutton, he says—'Both these wells contain an excess of organic impurity, partly of animal origin. They are both dangerous to health and unfit for drinking purposes.'

"I may say that I have carefully considered the analyses as sent in to me by Mr. Sutton, and I am forced to concur in the opinions he has expressed.

"The water supply of the whole village would seem to be contaminated by a pabulum of organic origin, which would form an excellent medium for the growth of many kinds of disease-producing organisms; and if the highly porous soil from which the water-supply is drawn, became inoculated at any time by, say, the Typhoid Bacillus, I would not venture to predict how many of the inhabitants would escape infection.

THE WATER SUPPLY FROM A GEOLOGICAL POINT OF VIEW.

"Of such importance is the Water Supply of any community, that before attempting to formulate any suggestions for an alternative supply for your consideration I was naturally anxious to obtain, if possible, the opinion of some expert Geologist, and I have therefore consulted Mr. F. W. Harmer, F.G.S., an acknowledged authority on the Geology of this District. I desire to acknowledge my thanks to him for the advice and assistance he has given me.

"On November 20th last Mr. Harmer very kindly accompanied me on a visit to the parish, where I pointed out to him the position of several of the cesspools, and their close proximity to the drinking water wells. I have since had the following communication on the subject from him, which, with his permission I lay before you :—

" ' Cringleford,
November 24th, 1908.

" ' Dear Dr. Long,

" ' Referring to our visit to Lenwade on Friday last, I " ' can only repeat the opinion I then expressed, that the con- " ' ditions under which that village is supplied with water are " ' unsatisfactory in the highest degree.'

" ' As shown in the diagram forwarded (a section taken " ' at right angles to the river Wensum, and extending to the " ' high land on either side of it) the valley in which that river " ' runs has been excavated out of the chalk and some deposits " ' of glacial age which overlie it. The latter have but little " ' bearing on our present enquiry; the chalk, which concerns " ' us more nearly, is, in the district in question, many hundred " ' feet in thickness.'

" 'Subsequently to the excavation of the valley, and " ' within it, a bed of porous sandy gravel has accumulated, " ' under different conditions, however, to any which now " ' obtain. This gravel, resting on the chalk as in a basin, " ' forms a low terrace which extends continuously under all " ' the inhabited parts of the village; owing to its slight " ' elevation above the river, it is permanently water-logged, " ' the water in the gravel being derived from the river and " ' from the rainfall which amounts to about two feet per

" 'annum over every part of the area, but to some extent also, " 'from the numerous cesspools to which you called my attention. These, it appears are seldom or never emptied, but " 'they readily get rid of their surplus water by soakage into " 'the gravel from which drinking water is obtained. This is " 'shewn by the fact that even during heavy rain the gullies " 'communicating with the cesspools do not overflow.'

" 'As water can be found everywhere at about the same " 'actual level, and generally a few feet only below the surface, " 'the wells are naturally very shallow. There is probably but " 'little difference between the level at which the surface water " 'escapes from the cesspools, and that at which, a few yards " 'distant, it is drawn from the wells for drinking. Moreover, " 'some part at least of the water taken from the latter for " 'household purposes must find its way into the cesspools, " 'from which, mixed with sewage, it may eventually pass into " 'the porous gravel, and by percolation back again into the " 'wells. As to the contents of the privy pails and bins containing human excrement, it seems that, as a rule, they are " 'dug into the garden adjoining the cottages. Considering " 'the permanently wet condition of the subsoil, however, and " 'tne shallowness of the wells, this cannot be unattended " 'with danger.'

" 'Under these circumstances, we might expect to find " 'that in all parts of Lenwade the wells are contaminated " 'with sewage : such a view is strongly supported by the " 'analysis made by Mr. Sutton.' "

Yours very truly,

F. W. HARMER.

ALTERNATIVE SCHEME FOR WATER SUPPLY SUGGESTED BY THE M.O.H.

"As long as the Water Supply of the village is obtained from surface wells, there will, I fear, always be grave risk of these wells becoming contaminated. Even if all the existing wells were cleaned out, and the cesspoles—or such of them as are known—were emptied and cemented, there would still remain a certain number of the latter whose existence is not known. Further, the soil of the whole village is of such a porous nature that surface contamination by human excrement would almost inevitably result again sooner or later."

"Fortunately, however, there is little doubt that a plentiful supply of water could be obtained from the underlying chalk, at no great depth, which would be free from contamination by the surface-soil water. I therefore suggest that the property owners combine and sink a Norton's Tube-well at a spot to be selected in the village, with the object of ascertaining at what depth a pure supply can be obtained, and if a good supply can be assured by this method I strongly recommend the discontinuance of the use of the present surface wells and the sinking of further tube-wells according to the requirements of the population.

SYDNEY H. LONG, M.D.,

Medical Officer of Health."

Norwich, 25th November, 1908.

SCHOOLS.

I am not in a position to make a detailed Report of all the Schools in the district, but for this year will mention only such of them as call for special remarks.

DRAYTON.

The surroundings of this School are open, and there is no obstruction to a free exchange of air around the building. In 1906, some alterations were made to allow of better ventilation, and this is now fairly good. The lighting is not as good as it might be. There is adequate heating arrangement during the cold weather.

The sanitary offices are kept in a cleanly state, and the accommodation is sufficient. The pan system is in vogue, and these are cleaned out weekly.

The lavatory accommodation consists of two hand-basins on a shelf, and these suffice for the whole School.

The school-rooms and cloak-room are well kept, and both are used for the drying of clothes.

The unsatisfactory drinking-water supply for the children in this School has already been drawn attention to in these Reports (*vide* Annual Report for 1906), and I regret to say that the only supply is still that obtained in a tank on wheels, from the Rectory, about 300 yards distant.

CROSTWICK.

This School is situated on the borders of the large village common, which is used as a playground by the children. The surroundings are open and unobstructed.

There are 53 children on the books.

The ventilation of the School-room is bad. The fresh-air inlets are from horizontally sliding windows. If these could be converted into the Hopper system the ventilation would be greatly improved. The floor is badly jointed, and there is much cold draught that comes up through the joints.

The warming is adequate. The Sanitary conveniencies are on the pan system, and are kept clean. There is one for the girls and infants, and another for the boys.

There is a very small Cloak-room, and this and the School-room are kept clean.

There is no water supply on the premises, and drinking water is obtained from a pump some 250 yards from the school, on premises owned by Mr. A. Crowe. It is fetched in a bucket, which is stood in the porch, and the children help themselvss with a mug.

FELTHORPE.

The situation of this school is good. The ventilation and lighting are insufficient, and the warming is hardly adequate. The school and cloak-room are kept very clean. The washing accommodation is by means of two basins, without drainage ; they are used irregularly, and are sufficient.

The sanitary conveniences are privy bins. These require new covers. There are only two for the whole school (78 children), another for each sex is required. The water supply is from a pump on the premises.

RINGLAND.

This is a School that stands well in open surroundings. The ventilation is by hoppers, with cowl outlet at top, and is good, and the School is well lighted. It is sufficiently warmed by stoves. It is kept very clean and tidy, and there is a good-sized cloak-room. In addition there is a spare room where children can sit out of school hours, and where their clothes can be, and are, dried.

The sanitary conveniences are sufficient, and are on the pan system. There is a sink for washing purposes, but, as in most of the other Schools in the district, this is very little used.

The drinking water is from a pump on the premises. There has been some little difficulty here this year in providing a dustbin for the School, and a proper receptacle for the urinal, but these nuisances, then existing, have since been abated.

WROXHAM.

This is a well-found School in all respects. I mention it because of its excellent sanitary arrangements, which are on the latrine system. It has now been in work for about three years, and I do not think a better system can be devised.

During the year I have visited most of the Dairies and Cowsheds in the districts, and I am glad to be able to report that most of these are now in a far more cleanly condition than they were a year or so ago. There is still much to be done in connection with many of these buildings, but such improvements as one would wish to see effected can often only be carried out gradually.

With regard to the Slaughter-houses, these are kept, on the whole, in a satisfactory condition.

I wish to record my thanks for the assistance I have received during the year from the medical men practising in the district, and from Mr. Fox, the Inspector of Nuisances.

SYDNEY H. LONG, M.D.,

Medical Officer of Health.

37, ST. GILES STREET,

NORWICH.

February 28th, 1909.

Report of the Inspector of Nuisances for the year 1908.

Population	11,075
Complaints received	20
Nuisances detected without complaint	450
Nuisances abated	458
Notices served	65
Cottages inspected	150
Slaughter houses inspected	7
Bakehouses inspected	7
Dairies and milkshops inspected	18
Cowsheds inspected	60
Workshops inspected	18
Filthy houses cleansed (Sec. 46 P.H.A., 1875) ...	5
Houses disinfected	20
Overcrowding abated	4
Houses placed in habitable repair	6
Houses closed	2
Houses erected or re-built for which Water Certificate sought	3
"Certificates" granted	3
Wells sunk or improved supplies of water	3
Wells cleansed or repaired	10

Wells closed	1
Houses connected with water mains	38
Earth, pail, or improved "privies" constructed, or existing privies altered	43
Privies and W.C.'s repaired	40
W.C.'s supplied with water	12
Animals improperly kept removed...	6
Samples of water taken for analysis	7
Compensation paid for destruction of infected bedding	£3 11s. 6d.
Canal boats inspected	9
Dead wells and cesspools emptied	49
Privies emptied and cleansed	240
Heaps of manure removed	34
Drains cleaned out	21
New sets of drains laid	5
New privies built	12
Slaughter-houses cleaned	3
Cowshed floors repaired and drains laid	3
Overcrowding abated	4
Schools disinfected	1
Dangerous chimneys repaired	13

(Signed)

THOMAS FOX,

Inspector of Nuisances.

Vital Statistics of Whole District during 1908 and Previous Years.

Year.	Population estimated to Middle of each Year.	Births.		Total Deaths Registered in the District.				Total Deaths in Public Institutions in the District.	Deaths of Non-residents registered in Public Institutions in the District	Nett Deaths at all Ages belonging to the District.	
				Under 1 year of age.		At all Ages.					
		Number.	Rate.*	Number.	Rate per 1,000 Births registered.	Number.	Rate.*			Number.	Rate.*
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
1898	12,876	344	26·4	43	125·0	178	13·7	...	...	179	13·9
1899	13,067	331	24·9	36	108·7	154	11·8	...	...	154	11·8
1900	13,219	358	28·6	51	142·0	186	14·0	...	...	186	14·0
1901	12,559	298	23·8	33	110·7	178	14·2	47	37	141	11·2
1902	12,647	305	24·9	45	147·5	217	17·1	53	40	177	13·9
1903	12,753	321	25·1	26	81·0	213	16·7	57	43	170	13·3
1904	12,828	310	24·1	42	136·1	235	18·3	51	42	193	15·0
1905	12,914	298	23·0	40	134·2	222	17·1	63	45	177	13·7
1906	13,025	305	23·4	36	118·0	194	14·8	57	37	157	12·0
1907	13,163	294	22·3	33	112·2	196	14·8	47	40	156	11·8
Averages for years 1898-1907.	12,905	316	24·6	38	121·5	197	15·2	42	40	169	13·0
1908	11,075	219	19·7	23	105·0	181	16·3	56	47	134	12·1

* Rates in Columns 4, 8, and 12 calculated per 1,000 of estimated population.

Area of District in acres (exclusive of area covered by water) 48,304
Total Population at all ages ... ... 12,559 At Census of 1901.
Number of inhabited houses ... ... 2,790 " "
Average number of persons per house ... ... 4·5 " "

The Union Workhouse is within the District. The Norwich City Asylum is also within the District, and it receives persons of unsound mind from without the District.

Cases of Infectious Disease notified during the Year 1908.

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.							TOTAL CASES NOTIFIED IN EACH LOCALITY.					
	AT ALL AGES.	At Ages—Years.											
		Under 1	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards.	Lenwade.	Drayton.	Sprowston.	St. Faiths.	Weston.	Old Catton
Diphtheria (including Membranous croup) ...	18	1	3	10	3	1	...	11	3	2	1	1	...
Erysipelas	5	1	...	...	1	2	1	...	...	...	...	...	...
Scarlet fever	12	...	2	10	...	...	...	...	...	...	...	...	...
Enteric fever	8	...	...	2	...	6	...	...	...	2	2	...	3
Puerperal fever	1	...	...	...	...	1	...	...	...	...	...	...	...
Pulmonary Tuberculosis...	3	...	...	...	1	2	...	...	...	...	1	...	...
Totals	47	2	5	22	5	12	1	11	3	4	4	1	3

Causes of, and Ages at, Death during Year 1908.

Causes of Death.	Deaths in or belonging to whole District at subjoined Ages.						
	All Ages.	Under 1 year.	1 and under 5	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.
Whooping Cough	7	3	3	1	...	...	...
Diphtheria (including Membranous Croup)	3	...	1	2	...	...	...
Enteric Fever	1	...	...	..	...	1	...
Epidemic Influenza	1	...	...	...	...	...	1
Diarrhœa	1	...	1	...	...	...	...
Enteritis	2	1	1	...	...	...	...
Puerperal Fever	1	...	...	...	...	1	...
Phthisis (Pulmonary Tuberculous)	13	...	...	...	4	9	...
Other Tubercular Diseases...	6	...	2	3	1	..	...
Cancer, Malignant Disease	13	...	...	...	...	5	8
Bronchitis	8	3	1	...	...	...	4
Pneumonia	4	...	...	...	...	3	1
Pleurisy	1	...	...	..	...	1	...
Premature Birth	4	4	...	...	...	...	...
Diseases and Accidents of Parturition	1	1	...	...	...	..	...
Heart Diseases	8	...	...	...	...	1	7
Accidents	5	1	...	...	...	2	2
Senile Decay	40	...	...	...	...	1	39
Nervous Diseases...	20	...	...	...	1	13	6
All other Causes	42	10	1	...	3	14	14
All causes	181	23	10	6	9	51	82

Infantile Mortality during the Year 1908.

CAUSE OF DEATH.		Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths under 1 Year
All Causes	Certified ...	6	1	1	...	...	3	2	...	1	...	1	1	...	1	...	2	19
	Uncertified ...	1	...	...	...	...	...	...	3	...	...	...	...	...	...	...	...	4
Whooping Cough		...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	3
Gastritis, Gastro-intestinal Catarrh		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Premature Birth		4	...	...	...	4	...	...	...	...	...	...	...	...	...	...	...	4
Congenital Defects		...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	1
Injury at Birth		...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
Atrophy, Debility, Marasmus ...		1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
Convulsions		...	...	...	...	...	1	...	2	...	...	...	...	...	...	...	...	3
Bronchitis		...	...	...	...	...	...	1	...	...	...	1	1	...	...	...	...	3
Suffocation, overlaying		...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
Other Causes		2	...	...	...	2	1	1	1	...	...	...	...	...	...	...	...	5
		7	1	1	...	9	3	2	3	1	...	1	1	...	1	...	2	23

Population, estimated to middle of 1908, 11,075. Births in the year—legitimate 206, illegitimate 13.
Deaths in the year of legitimate infants 21, illegitimate infants 2. Deaths from all Causes at all Ages, 181.